

OCR3

Mycotic infection in protracted diabetic foot ulcer

Z Htike, R Jogia, D Modha, R Berrington, D Bruce, S Jackson, M-F Kong

Departments of Diabetes & Microbiology, University Hospitals of Leicester NHS Trust, Leicester General Hospital, Leicester, UK

A 72 year old man with type 2 diabetes and hypertension was referred to our multidisciplinary diabetic foot ulcer clinic with a foot ulcer of 2 years duration. He was on immunosuppressant therapy since a renal transplant 6 months prior to presentation. On examination, there was a grade 2 well-circumscribed ulcer on the dorsum of the left foot between the 3rd and 4th toes with purulent exudate which grew Staphylococcus. Osteomyelitis was confirmed on X-ray. The ulcer was debrided and flucloxacillin was started. However, the ulcer increased in size spreading to the plantar aspect. Granulation tissue was excised and sent for histology to exclude malignancy. Despite treatment with antibiotics for 6 weeks, he developed gangrene and his 3rd and 4th left toes were amputated. The wound at the amputated site was slow to heal and grew Pseudomonas, Staphylococcus and Candida species which was treated with a combination of ciprofloxacin and doxycycline. ZN stain for AFB (acid fast bacilli) was negative. Inflammatory markers were normal. Histopathology of the excised granulation tissue consistently showed granulomatous inflammation with fungal element (mycetoma) - *Fusarium Solani* species. Voriconazole was started according to isolate sensitivity. Subsequent MRI showed enhancing soft tissue in the region of amputation indicating infection of soft tissue without bony enhancement. Antifungal treatment was continued. The wound at the amputated site started to heal gradually but progressively after 6 months and the patient was successfully discharged back to the community podiatry team a year after initial presentation.

Although the incidence of fungal infection in diabetic foot ulcer is low, the index of suspicion should be raised in chronic non-healing ulcers especially in immunocompromised patients. This case demonstrates that administration of anti-fungal agent in addition to antibiotics for mixed bacterial and fungal infection healed the ulcer although the use of antifungal therapy in protracted diabetic foot ulcers remains unclear.